

LIEBHERR

CONSTRUCTION EQUIPMENT



[[TERRAHA WK]] LIEBHERR R920 047896-1705 - Swing Drive

Sample No: LH0244612

Oil Type: LIEBHERR GEAR BASIC 90 LS



SAMPLE INFORMATION

Sample Number	LH0244612	---	---	---
Sample Date	24 Jan 2024	---	---	---
Machine Hours	900	---	---	---
Oil Hours	900	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	SEVERE	---	---	---

LIEBHERR EQUIPMENT SOURCE

8200 FAYETTEVILLE ROAD
RALEIGH, NC

US 27603

Contact: Timothy Bailey

timothy.bailey@liebherr.com

T:

F: (919)329-0084



OIL CONDITION

Visc @ 40°C	cSt	● 307	---	---	---
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CONTAMINATION

Water	%	● 3.06	---	---	---
Silicon	ppm	● 19	---	---	---
Sodium	ppm	● 6	---	---	---
Potassium	ppm	● 3	---	---	---



WEAR METALS

Iron	ppm	● 1654	---	---	---
Copper	ppm	● 148	---	---	---
Lead	ppm	● <1	---	---	---
Tin	ppm	● 7	---	---	---
Aluminum	ppm	● 1	---	---	---
Chromium	ppm	● 16	---	---	---
Molybdenum	ppm	● 0	---	---	---
Nickel	ppm	● 3	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	● 14	---	---	---
Vanadium	ppm	<1	---	---	---



ADDITIVES

Calcium	ppm	19	---	---	---
Magnesium	ppm	● 5	---	---	---
Zinc	ppm	● 163	---	---	---
Phosphorus	ppm	● 1838	---	---	---
Barium	ppm	● 14	---	---	---
Boron	ppm	● 8	---	---	---

Diagnosis

We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Gear wear is indicated. Elemental level of silicon (Si) above normal indicating ingress of seal material. There is a high concentration of water present in the oil. The oil viscosity is higher than normal. The oil is no longer serviceable due to the presence of contaminants.

Depot: LIEBHERRNC

Unique No: 10848677

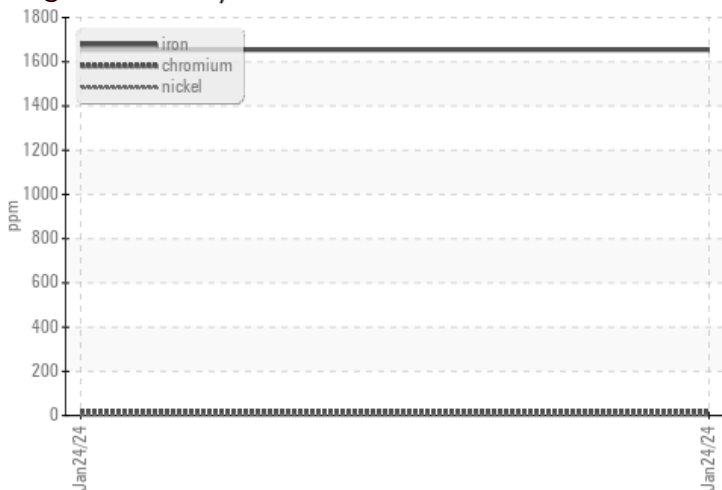
Signed: Sean Felton

Report Date: 30 Jan 2024



GRAPHS

● Ferrous Alloys



Non-ferrous Metals



● Viscosity @ 40°C

